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ABSTRACT

Two studies investigated three questions: (1) Do second language learners provide mostly faulty feedback to their peers in evaluating written composition? (2) Is peer feedback more or less effective than teacher correction? and (3) Do second language learners welcome or resist peer feedback? The studies were done in Thailand and Hawaii with college students of English as a Second Language In the first study, a small group (n=18) of students evaluated each other's composition drafts. Corrections and indications of uncertainty were analyzed, and results showed relatively little miscorrection. These results parallel the findings in previous research on peer oral correction. The second study required 81 students at three proficiency levels to write compare-and-contrast essays on selected topics. The essays were evaluated by teachers, peer readers, or the student writers themselves. Students were surveyed concerning their feelings about the feedback types. Results indicate that the type of corrective feedback did not affect informational or rhetorical accuracy, but teacher and peer feedback was found to be more effective for grammatical accuracy. Subjects strongly preferred teacher feedback. (MSE)

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PEER FEEDBACK IN SECOND LANGUAGE WRITING INSTRUCTION: BOON OR BANE?

Paper presented at the 1989 Annual Convention of
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I. The Theoretical Context of the Studies

Peer feedback is part of a larger category of educational activities in which students work together in groups to promote student-centered learning. Three prominent educational theorists whose works are cited in support of such activities are Piaget (1959), Vygotsky (1962, 1978) and Dewey (1966).

Piaget maintained that interaction can be a source of cognitive conflict which can lead learners to re-examine and adjust the frameworks through which they view the world. Vygotsky emphasized the central role of social interaction in learning. Another key Vygotskian concept is the zone of proximal development, i.e., the area between what one can do on one's own and what one can do with help from others. Dewey was a strong believer in making students, rather than teachers, the hub of classroom activities.

Research on cooperative learning has given some empirical validation to the use of thoughtfully organized group activities as a means of enhancing not only academic achievement, but a host of affective variables as well (Johnson, Maruyama, Johnson, Nelson, & Skon, 1981; Sharan, 1980; Slavin, 1980). This and other

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research, in addition to years of classroom experience, have led scholars to hypotheses about key variables in structuring group interaction (Hythecker, Dansereau & Rocklin, 1988; Johnson & Johnson, 1987; Webb, 1983).

One commonly adopted method to promote student-centered learning in the writing class is to use peer feedback in the writing process, particularly at the revision stage. Traditionally, it is the teacher who is expected to provide correction. But more recently, in order to make writing a more meaningful process involving social interaction not only with the instructor but also among the peers, peer feedback has been introduced into the writing class. Peer feedback on student writing has been advocated for first language learners (Bruffee, 1984; Elbow, 1973; George, 1984; Jacko, 1978) and second language (L2) learners (Raimes, 1983; Witbeck, 1976).

However, there are concerns about introducing peer feedback into the classroom. Especially, in the context of L2 writing, one concern is: Do L2 learners provide mostly faulty feedback to their peers, miscorrecting rather than correcting composition drafts? Obviously, if the peer readers are unable to provide helpful suggestions for improvement, what is the point of using peer feedback at the revision stage? Another question that is often raised is: Is peer feedback more effective or less effective than traditional teacher feedback? If teacher correction is far superior to peer feedback, then why should an instructor switch from an efficient method to an inefficient method? Closely related to these two questions is a third

concern: How do L2 learners feel about the use of peer feedback? Will they welcome it or resist it?

The two studies reported in this presentation were intended to gain insight into these issues. Study One addresses the first concern, and Study Two addresses the second and third concerns.

II. Study One

The subjects were eighteen third-year English majors at Chiang Mai University in Chiang Mai, Thailand. They were enrolled in a course devoted to English writing and reading. Several times during the term, peer feedback on composition drafts was carried out. For the study reported here, the peer feedback procedure was the following. The students first wrote brief composition outlines on an assigned topic. The outlines were checked by the teacher for content and organization only and returned. During the following class period, the outlines were expanded into composition drafts, which were turned in at the end of class. Two photocopies were made of each draft. The following class period, the instructor randomly paired the students and asked them to read each other's drafts and make suggestions about how to correct the grammatical mistakes in the drafts.

The suggestions were to be of two types. First, if an item was believed to be wrong, the readers were to draw a line through it and write what they thought was the correct form above it. Henceforth, these will be called corrections. Second, if the readers thought something might be incorrect but were not sure, then the item in question was only circled, with no correction made. Henceforth, these will be called markings. All the markings and corrections were recorded on one copy of the draft.

After the students in each pair had spent twenty minutes reading and improving each other s draft, they were given thirty minutes to discuss the suggestions. Then the readers were given an opportunity to revise their suggestions on the second copy of the same draft. This was done to record whatever changes that might have taken place on the reader's part as a result of the discussion. Finally, the students rewrote their drafts in light of the suggestions and the discussion.

The two types of suggestions, corrections and indications of uncertainty, were coded differently. Corrections were placed into one of the four categories:

A1) original wrong --- correction wrong

Example: (original) Suwit living (live) in Chiang Mai.

(correction) Suwit living in Chiang Mai.

A2) original wrong --- correction right

Example: (original) Suwit live (lives) in Chiang Mai.

(correction) Suwit live in Chiang Mai.

A3) original correct --- correction also right

Example: (original) Suwit lives in Chiang Mai.

(correction) Suwit lives in Chiang Mai.

A4) original correct --- correction wrong

Example: (original) Suwit lives in Chiang Mai.

(correction) Suwit lives in Chiang Mai.

Indications of uncertainty were placed into only two categories: B1, wrong in original; and B2, correct in original.

The markings and corrections on the first copy were coded and compared with the coded markings and corrections on the second copy in order to determine whether the discussion that occurred between the reading of the two copies had produced any effect. The scoring was done by the researcher and checked by another teacher. Disagreements were resolved by the decision of a third teacher.

Table 1 about here

Table 1 shows the frequencies in various categories on the two photocopies. What stands out here is that by far the largest type of the peer readers' corrections was A2, i.e., accurate correction of incorrect forms (74.68% for the first copy, 71.60% for the second copy). If the frequency in A3, i.e., a correct alternate form suggested as correction for an already correct form, is added to the frequency in A2, acceptable corrections constitute 83.54% and 81.48% for Copy 1 and Copy 2 respectively. Unacceptable corrections, A1 and A4 combined, take up only 16.45% and 18.52% for Copy 1 and Copy 2 respectively. The discussion does not seem to have changed the relative proportions of the four categories of corrections.

Table 1 also indicates that peer readers have quite an accurate sense of how sure they ought to feel about suggestions concerning grammar. For copy 1, in 53.33% of the marking in the B categories, their feeling that something was wrong turned out to be a valid judgment. That percentage is 64% for Copy 2. Those percentages do not deviate drastically from the probability of a random guess (50%). When the students say they are not sure, they

are really not sure, and it is with good reason that they refrain from suggesting corrections. The discussion that took place between Copy 1 and Copy 2 seems to have reduced the number of cases that looked ambiguous to the peer readers (a 44.44% decrease).

With all the markings and corrections combined, acceptable responses constitute 74.19% for Copy 1 and 82.08% for Copy 2, if A3 corrections are considered as acceptable. Excluding corrections in the A3 category, corrections and markings definitely conducive to grammatical improvement are 66.94% and 69.81% for the two copies respectively.

Table 2 about here

Table 2 displays the changes that took place between the first draft and the final version. Students wrote the final version after they had seen and discussed the peer reader's markings and corrections on the first photocopy. Again, what stands out is the size of the A2 category, i.e., right correction of incorrect forms. Most of the right corrections in the A2 category (89.83%) were incorporated into the final version. It should be pointed out that, of the seven A4 miscorrections, four were adopted in the final version. However, these four cases came from the same student's draft and involved the same grammatical point: articles. Of all the 79 corrections suggested, only 8 miscorrections (10.13%) were adopted in the final version. The probability of a suggested miscorrection being adopted in this case was 0.73 (8 out of 11). However, the numbers were very small

in this study. Future studies on a much larger scale are needed to prove or disprove the probability.

As to indications of uncertainty, 66.67% of the B1 markings (wrong in original) led to correct changes (16 out of 24). None of the B2 markings, (correct in original) resulted in an incorrect change. The markings and the subsequent discussion obviously cleared up much of the uncertainty. Those 45 indications of uncertainty and the subsequent discussion translated into 32 correct decisions as to whether correction was necessary or not or what changes would be appropriate in those particular places.

Of all the corrections and indications of uncertainty combined, 69 suggestions (sum of A2 and B1a, 55.65% of all the suggestions) improved the quality of writing in those specific places. Only 4 suggestions (the 4 cases in which a miscorrection was adopted to replace a correct form, 3.23%) had an adverse effect on the quality of writing in those places. All the other cases (51 out of 124) had no noticeable effect, that is, the place where a mistake had been made remained incorrect, whether or not the actual wording had been changed in the revision process. Similarly, where the original text was correct, it remained correct, no matter whether changes had been made or not.

It is the last two scenarios that deserve special attention, because in some cases a correct form was substituted for another correct form, and in some other cases an incorrect form was substituted for another incorrect form. Although those changes did not ostensibly affect the quality of the writing, they did pose challenges to the students. These challenges might assist or

hamper the learning process by creating controversies within the learner's interlanguage system. Unfortunately, the present study could not address this issue.

The major finding of the study is the relatively small amount of miscorrection found in peer feedback. Such a result may ease some L2 teachers' and students' concern that peer feedback is a case of the blind leading the blind. This finding with students in a writing class parallels the conclusions of two previous studies which found little miscorrection among L2 learners engaged in speaking activities (Bruton & Samuda, 1980; Porter, 1983, cited in Long and Porter, 1985). For the level of ESL proficiency represented by the subjects involved, peer correction of grammar seems to be a viable pedagogical procedure beneficial to students not only for the suggestions they receive from their peers, but also for the learning which goes on as they edit their peers' drafts.

III. Study Two

The subjects for the second study were 81 ESL students enrolled in the University of Hawaii and Hawaii Pacific College in Honolulu. They were classified into three levels of English proficiency: advanced, upper intermediate, and lower intermediate, according to their scores on a University of Hawaii written test routinely administered to incoming foreign students. Their essays were graded according to the structured ESL Composition Profile (Jacobs, Zingraf, Wormuth, Hartfiel, & Hughey, 1981) by ESL instructors who were familiar with the profile and were not involved in any other aspects of the study. The subjects were

randomly assigned to three treatment groups to receive corrective feedback from teachers, peer readers, and the student writers themselves, respectively.

The procedure used in the study called for the students to write an essay that involved comparison or contrast. Students were expected to take the writing assignment as a regular in-class task so that their performance would not deviate drastically from their normal standards. On the first day, three topics were put on the blackboard:

1. Compare and contrast mental work with physical labor;
2. Compare and contrast movies and television;
3. Compare and contrast your high school and your college.

The subjects were free to choose any of the topics or suggest their own topics as long as their topics would involve comparisons or contrast. One of the more important concerns at this stage was how to control for the difficulty of the assigned content areas. The three topics had been selected in consultation with the regular instructors. None of the topics had been used prior to the experiment, and all the instructors agreed that the topics had relevance to a foreign student's life in the United States. Besides, the topics were broad enough for the subjects to look for some points of interest. The control over rhetorical pattern (comparison/contrast) and the expository nature of the task precluded confounding of topic selection with organizational or stylistic types.

Evidence was obtained to the effect that the subjects across

the three different levels did not feel any one of the topics significantly more attractive than the others. 20 chose Topic 1 (24.7%), 30 wrote on Topic 2 (37%), and another 30 on Topic 3 (37%). One student decided on a new topic with the researcher's approval (1.2%). He was not included in the computation of the "goodness of fit" chi-square test (Ferguson, 1981:204). The chi-square was non-significant, confirming the null hypothesis that the selection of topics did not exhibit a lop-sided pattern. The subjects across the proficiency levels did not seem to feel much more ease with one topic than another.

The researcher then initiated and led a 10-minute casual discussion to ensure that the students understood the meaning of "compare and contrast". Approximately 40 minutes was allocated for the first drafts which were written by individual students. All the drafts were collected at the end of the regular 50-minute session.

On the second day, 28 students received their first drafts with teacher suggestions for improvement. No explicit corrections were given. On the same day, the 27 students in the peer feedback group, divided into subgroups of three, read each other's drafts and provided corrective feedback by underlining mistakes, adding insertion marks where inappropriate omissions had occurred, and writing down concise comments or suggestions (not explicit corrections). At the same time, the 26 students in the self-feedback group worked on their drafts without any assistance. On Day Three, all the students wrote their final versions, making as much use as they wished of whatever feedback had been provided.

These final versions were measured in the content/discourse

dimension and the grammar/mechanics dimension separately. The content/discourse dimension of writing was assessed with reference to 14 descriptors which were substantiated by 44 criterion questions (Jacobs, et al, 1981). This dimension covered content, organization, and vocabulary. Each aspect had a subscore, and the 3 subscores added up to a content/discourse score. The grammar/mechanics dimension was rated in the following way:

a) grammar score (no. of grammatical errors / no. of t-units)
b) mechanics score (no. of mechanical errors / no. of t-units)
c) grammar/mechanics score (no. of grammatical and/or mechanical errors / no. of t-units)

Inter-rater reliabilities between two judges, who were not involved in any other aspects of the study, ranged from 0.66 to 0.77 for the content/discourse subscores. Another pair of raters determined the grammatical and mechanical errors in the compositions. Their percentages of agreement reached 81% and 93% for grammatical and mechanical errors, respectively.

With initial ESL proficiency as an independent variable (3 levels: advanced, upper intermediate, and lower intermediate) and type of corrective feedback as the other independent variable (3 levels: teacher feedback, peer feedback, and self-feedback), a 3 X 3 analysis of variance was conducted. It was found that for content, organization, and vocabulary, feedback was not a significant factor. Nor was the interaction effect (level X feedback) significant in any of the 3 subdimensions: content, organization, and vocabulary. Therefore, the composite

content/discourse score was not significantly affected by type of corrective feedback. As regards the grammar/mechanics dimension, feedback type was found to have a significant effect upon grammar score. No interaction effect was found.

Tables 3 and 4 about here

Neither prior proficiency nor feedback type was significant with respect to mechanics scores, probably because the incidence of mechanical error was extremely low across the three proficiency levels. When grammatical errors and mechanical errors were combined, feedback was found to have a significant influence upon the composite grammar/mechanics score, simply because of the predominance of grammatical mistakes in the composite score.

Several points can be made at this stage. First, as expected, prior proficiency proved to be a dominant variable, significant in all cases, except in mechanical accuracy. It could be that mechanics was no longer a real problem even for the lower intermediate students. Therefore, improvement in this respect was almost imperceptible. Second, none of the interaction effect F's reached the significance level, which conflicts with some of the findings in a previous study (Zhang and Halpern, 1984). However, a comparison between the raw data sets of the two studies revealed that the earlier study had used two groups very close to each other in terms of prior proficiency, whereas the three groups in the present study were much wider apart. It is conceivable that, with widened disparities, the interaction effect would be less likely to show.

To specifically address the question of how peer feedback compared with teacher feedback or self-feedback, post hoc multiple comparisons were made, using the Student-Newman-Keuls method (Ferguson, 1983). Because feedback type had a significant main effect only with respect to grammar and the composite

grammar/mechanics dimension, the Student-Newman-Keuls test was applied only to these two scores.

Tables 5 and 6 about here

Teacher feedback was not significantly more effective than peer feedback, but it was significantly more effective than self-correction. However, peer feedback was not significantly different from self-feedback. The same pattern was retained when the composite grammar/mechanics scores were considered.

The basic findings of the experiment may be summed up as follows:

1) The content/discourse aspects of ESL writing were not significantly influenced by the manipulation of feedback.
2) For the L2 learners in this study, manipulation of types of corrective feedback had a significant effect on grammatical accuracy.
3) Across the three levels of ESL proficiency, it is not certain whether teacher feedback was more beneficial than peer feedback in correcting grammatical mistakes.

In addition to the writing experiment reported above, a survey was conducted on the third day of the study in order to find out how the subjects felt about different types of feedback. Each subject was asked to answer two questions:

1. If you are given a choice between the traditional teacher feedback and the non-traditional, non-teacher feedback, which would you prefer?
2. If you are given a choice between peer feedback and self-

feedback, which would you prefer?

76 of the 81 subjects (93.8%) chose the traditional teacher feedback over non-teacher feedback. A binomial test produced a z-score of 8.14 ($p < 0.05$). On Question 2, 49 (60.5%) stated a preference for peer feedback, 28 (34.6%) for self-generated feedback. 4 students (4.9%) failed to make a choice. A binomial test produced a z-score of 2.39 ($p < 0.05$). Further analysis using the chi-square test revealed that such a pattern of preferences existed across sexes, proficiency levels, ethnic groups, or lengths of stay in the U.S. These results support the belief that L2 students prefer teacher feedback. The alleged intrinsic unpopularity of teacher correction with first language learners, a common theme in many books and articles on how to teach English as a first language (Clifford, 1981; Elbow 1973; Moffett 1968; Pierson 1967) does not seem to apply to the L2 situation. It should be added that this finding of L2 student preference for teacher feedback concurs with the findings in other studies (Chaudron, 1984; Jacobs, 1987; Partridge, 1981).

Interestingly, the almost unanimous preference for teacher feedback was not adequately supported by the results of the writing experiment. Teacher feedback was not significantly superior to peer feedback or self-feedback in the content/discourse dimension. Furthermore, in the grammatical/mechanical accuracy category, no significant difference was found between teacher feedback and peer feedback. Nevertheless, student resistance should be taken into consideration when peer feedback is introduced into the L2 classroom. Very similar results were found in the first study of

this presentation. Although students in Chiang Mai University did not trust peer feedback (Jacobs, 1987), the writing experiment has shown that student writers did benefit from peer feedback. There is, as yet, no evidence to suggest that "peers' feedback is more at the level of development or interest, thus perceived as more relevant than the superior or old teacher's feedback" (Chaudron, 1984, p.2).

IV. Conclusion

Study One has provided evidence suggesting that, for L2 learners at a proficiency level represented by the sample, miscorrections of grammatical features constitute a very small part of the total feedback provided by peer readers. Also, discussion between the student writer and the peer reader led to a considerable reduction of uncertainty concerning grammatical judgments. Therefore, peer correction may serve as an instructional resource to facilitate L2 writing.

Study Two examined the differential effects of corrective feedback upon the content/discourse and the grammar/mechanics dimensions respectively. It was found that, for the L2 population represented by the sample, manipulation of the types of corrective feedback provided did not produce a significant effect upon informational or rhetorical adequacy. But feedback type does have an effect upon grammatical accuracy. Teacher feedback was found to be more effective than self-provided feedback in dealing with grammatical errors, but no significant difference was found between teacher feedback and peer feedback in this respect.

Although there is evidence that peer feedback can positively

influence the writing process, the subjects strongly preferred the traditional teacher feedback to the non-traditional, non-teacher feedback. However, given a choice between peer feedback and self-generated feedback, the subjects would prefer peer feedback. This suggests that L2 learners might resist peer feedback, if the instructor overly emphasizes the role of peer feedback or employs the peer critique procedure to the exclusion of teacher input.

In conclusion, peer feedback does not seem to provide as much misleading guidance as some instructors and students fear, and students are able to clear a considerable amount of confusion among themselves. Although in comparison to teacher feedback, peer feedback does not affect the rhetorical or informational aspects of L2 writing to any significant degree, it does improve the grammatical accuracy in a no less efficient fashion than teacher feedback. However, it is important that L2 learners be made aware of the potential of peer feedback. Otherwise, peer feedback procedures may run into strong resistance, especially if peer feedback is adopted as the predominant or even exclusive procedure in the L2 writing class. Peer feedback and teacher feedback can complement each other, but the studies produced no evidence to the effect that peer feedback is superior to teacher feedback and therefore should replace the traditional teacher feedback in the L2 writing class.

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Table 1: Numbers of suggestions in six categories on Copies 1 & 2

Category	Copy 1 N	Copy 1 %	Copy 2 N	Copy 2 %
A1 original wrong, correction wrong	4	5.06	2	2.47
A2 original wrong, correction right	59	74.68	58	71.60
A3 original right, correction right	9	11.39	13	16.05
A4 original right, correction wrong	7	8.86	8	9.88
A categories Subtotal:	79		81	
B1 original wrong	24	53.33	16	64.00
B2 original right	21	46.67	9	36.00
B categories Subtotal:	45		25	
Total:	124		106	

Table 2: Number of suggestions in six categories on Copy 1 and the final version

Category			Copy 1	Final Version: Adopted	Final Version: Not Adopted
A1	original wrong	correction wrong	4	4	0
A2	original wrong	correction right	59	53	6
A3	original right	correction right	9	7	2
A4	original right	correction wrong	7	4	3
A categories Subtotal:			79	68	11
B1	original wrong	a) correction	24	16	6
		b) miscorrection		2	
B2	original right	a) correction	21	5	16
		b) miscorrection		0	
B categories Subtotal:			45	23	22
Total:			124	91	33

Table 3: ANOVA of grammar scores

Source	SS	df	MS	F
ESL proficiency	2.70	2	1.35	4.65*
Feedback type	2.26	2	1.13	3.89*
Interaction	2.10	4	0.53	1.81
Error	20.92	72	0.29	
Total	27.92	80		

Table 4: ANOVA of grammar/mechanics scores

Source	SS	df	MS	F
ESL proficiency	4.78	2	2.39	5.62*
Feedback type	3.81	2	1.90	4.48*
Interaction	2.36	4	0.59	1.39
Error	30.59	72	0.43	
Total	41.38	80		

Table 5: SNK test of grammar scores

	Teacher feedback X=0.84	Peer feedback X=1.05
Peer feedback X=1.05	0.21	
Self-feedback X=1.24	0.40*	0.19

Table 6: SNK test of grammar/mechanics scores

	Teacher feedback X=1.05	Peer feedback X=1.36
Peer feedback X=1.36	0.31	
Self-feedback X=1.57	0.52*	0.21